

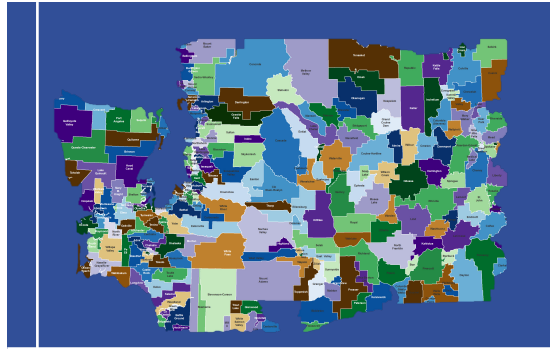


## Question:

What are the different characteristics, conditions, and results that are particular to high schools that serve children who are poor versus high schools that serve children who aren't poor?

## Variables:

- Test Scores: End-of-Course (EOC) Math Year 1, and 10<sup>th</sup> Grade Reading
- Average Years of Teacher Experience
- Adjusted 5-year Cohort Graduation Rate
- Race/Ethnicity
- Percent of Students in the Transitional Bilingual Program
- Percent of Students Attending College
- Student to Teacher Ratio
- Gender



## Conclusion:

Overall, the Washington State school system does maintain uniformity in gender, average years of teacher experience, and student to teacher ratios. However, there are several factors that demonstrate non-uniformity in our school system between high schools that serve children who are poor versus those who serve children who are not poor. Specifically, we have found definite distinctions in the EOC Math year 1 and 10<sup>th</sup> grade reading test scores, the adjusted 5-year cohort graduation rate, race/ethnicity, percent of students attending college, and the percent of students in transitional bilingual programs.

Therefore, due to these several factors that shows that schools that serve the rich (<15%FRPM) have different characteristics, conditions, and results from schools that serve the poor (<70%FRPM), we can conclude that the charge made by the constitution that there be a "general and uniform system of public schools" **"without distinction or preference on account of race, color, caste, or sex,"** is not being achieved based on the 2012-13 data.

# Curtis Senior HS Team Project

*The extent of uniformity in public school systems for the state of Washington*

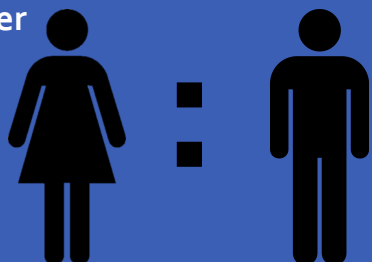


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# Uniformity:

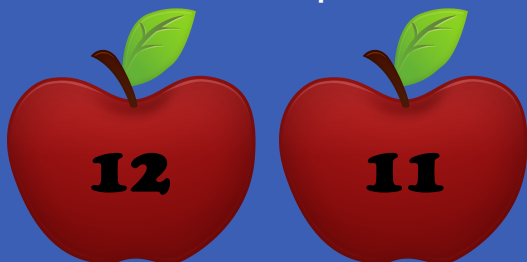
\*Low poverty schools on the left and high poverty schools on the right

## Gender



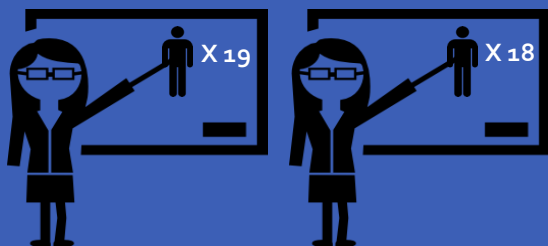
For both the high and low FRPM, the ratio of girls to boys was 1:1.

## Years of Teacher Experience



The average years of teacher experience was between 11 and 12 years for the low and high poverty schools.

## Student : Teacher



For student to teacher ratio, the average ratio was 18:19 for the low to high poverty schools.

\*Schools with a ratio of 1 when rounded were counted as uniform.

## Race/Ethnicity and Transitional Bilingual Program



Figure 1: <15%FRPM

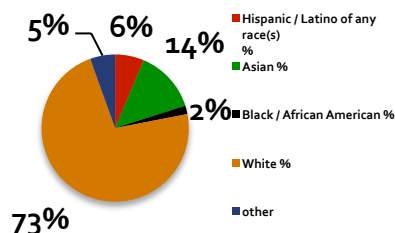
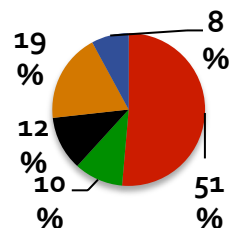


Figure 2: <70%FRPM



- Pie charts of ethnicity at high and low Free and Reduced Price Meals (FRPM) schools demonstrate non-uniformity due to:
- Low FRPM schools containing high percentages of white & Asian populations.
- High FRPM schools are predominantly Hispanic & African American.

Figure 3:

% of Students in Transitional-Bilingual Program

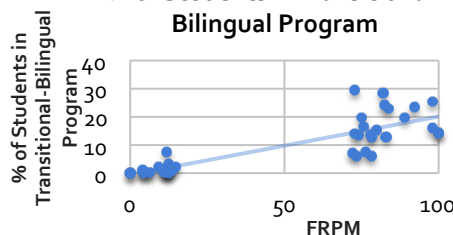


Figure 3 shows that the percent of students in the transitional-bilingual programs increase as the %FRPM increases. This is due to the high percentage of ethnicities that do not speak english as their native language in the schools with high percentages of FRPM.

Figure 4

EOC Math Year 1

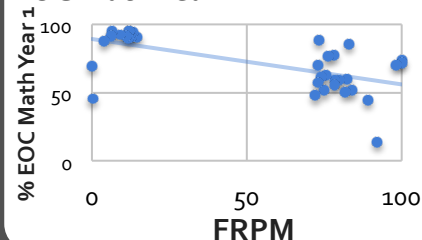
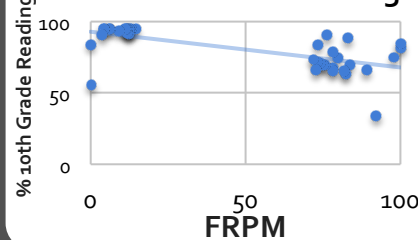


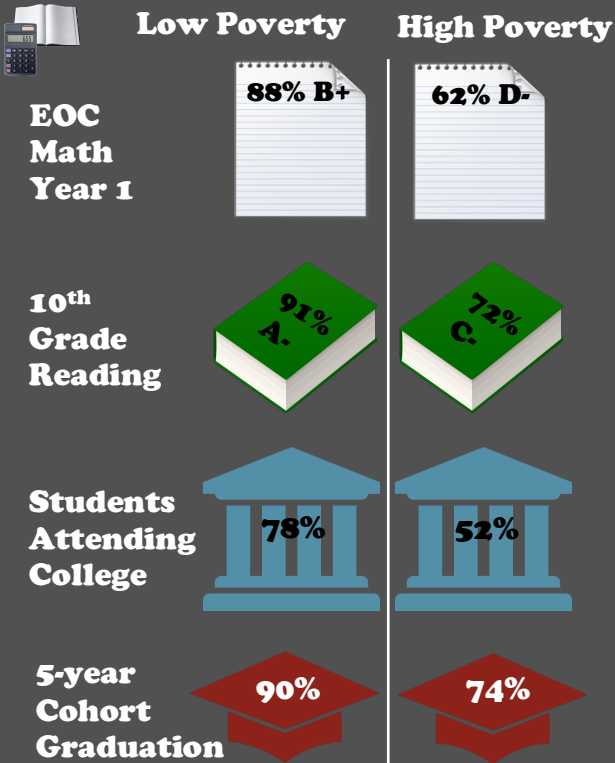
Figure 5

10th Grade Reading



Scatterplots of EOC and Reading vs FRPM demonstrates a decrease in performance on standardized tests as poverty level increases

## How well are students being prepared?



The chart above shows that in each of the variables, that students attending low poverty schools are being better prepared than students in high poverty schools.

Scatterplots of *Students Attending College* and *5-year Cohort Graduation Rate* plotted with FRPM, showed decreasing trends similar to Figures 4 and 5 as FRPM increases.